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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,624	10/09/2001	Lee J. Rosen	3047-7434	6243

7590 07/02/2003

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EXAMINER

MAI, NGOCLAN THI

ART UNIT	PAPER NUMBER
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1742

DATE MAILED: 07/02/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,624

Applicant(s)

ROSEN ET AL.

Examiner

Ngoclan T. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 and 51-70 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 and 61-64 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 67-70 is/are allowed.
- 6) ☒ Claim(s) 1 and 51-54 is/are rejected.
- 7) ☒ Claim(s) 2-20, 25-28, 55-60, 65 and 66 is/are objected to.
- 8) ☒ Claim(s) 1-28 and 51-70 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant's election without traverse of group I, claims 1-28 and 51-70 in Paper No. 6 is acknowledged.

Applicants also elected metal species for primary particle and salt species for second material. Accordingly, Claims 21-24 and 61-64 drawn to non-elected species and have been withdrawn from further consideration.

Claims 29-50 and 71-79 have been cancelled in Paper No. 6.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 depends on claim 18 which depends on claim 16.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 51 is rejected under 35 U.S.C. 102(b) as being anticipated by Klabunde et al.

Klabunde et al teach the claimed powder. Klabunde disclosing composite nanoparticles having average diameter of from 5 to 500 nm and formed of an elemental metal core surrounded by a metal-containing shell material, see abstract and Figure 13. Although Klabunde et al do not specifically teach the particles size of the element metal core in the metal-containing shell material, the element metal core would have particles size less than 500 nm and therefore it inherently have particles size in the claimed ranges.

5. Claims 1 and 51-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Bhagat.

Bhagat disclosed a cemented carbide powders having nanograined structure comprising agglomerated particles containing WC grains on the nanograin scale in a Co matrix, see col. 3, lines 28-38. Note that nanograin scale is well known in the art for having size of less than 100 nm. Also note that the teaching of WC grain in Co matrix implies that Co encapsulates the WC grains.

6. Claims 2-20, 25-28 and 55-60, 65-66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all

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of the limitations of the base claim and any intervening claims. These claims contain limitations which are not taught or disclosed by the cited prior art.

7. Claims 67 -70 are deemed allowable because while capacitor grade powder comprising agglomerations of primary particles having an average size in the range from about 0.1 to about 5 microns, see Pathare et al, (col. 2, lines 10-16) is known, the prior art neither teaches the number of the primary particles in each agglomeration nor discloses at least 60% of the constituent primary particles in each of the agglomerations are within $2.25dN^{1/3}$ nanometers of at least 60% of the other constituent primary particles, where N represent the number of primary particle ins the same tightly agglomeration and d represents the average size of said primary particles.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ngoclan T. Mai whose telephone number is (703) 306-4162. The examiner can normally be reached on 7:30-4:00 PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (703) 308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Ngoclan T. Mai
Primary Examiner
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